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| APPLICATION NO. | FII | LING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO |
|-----------------------------------|------------|------------|----------------------|---------------------|-----------------|
| 10/074,549 | 02/12/2002 | | Robert J. Sinaiko | SHPR-01041USR SRM | 6755 |
| 23910 | 7590 | 12/06/2005 | | EXAMINER | |
| FLIESLER | | | TRAN, THAO T | | |
| FOUR EMBARCADERO CENTER SUITE 400 | | | | ART UNIT | PAPER NUMBER |
| SAN FRANCISCO, CA 94111 | | | | 1711 | |

DATE MAILED: 12/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | Application No. | Applicant(s) | | | | | |
|---------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|-------------|--|--|--|--|
| | | 10/074,549 | SINAIKO ET AL. | | | | | |
| | Office Action Summary | Examiner | Art Unit | | | | | |
| | | Thao T. Tran | 1711 | | | | | |
| Period fo | The MAILING DATE of this communication or Reply | appears on the cover sheet wi | th the correspondence ad | Idress | | | | |
| WHIC - Exter after - If NO - Failu Any r | ORTENED STATUTORY PERIOD FOR RECHEVER IS LONGER, FROM THE MAILING INSIDE OF THE MAY BE AVAILABLE UNDER THE PROVISIONS OF 37 CF SIX (6) MONTHS from the mailing date of this communication period for reply is specified above, the maximum statutory per to reply within the set or extended period for reply will, by seply received by the Office later than three months after the red patent term adjustment. See 37 CFR 1.704(b). | G DATE OF THIS COMMUNION of R 1.136(a). In no event, however, may a r n. eriod will apply and will expire SIX (6) MON statute, cause the application to become AB | CATION. eply be timely filed THS from the mailing date of this c ANDONED (35 U.S.C. § 133). | | | | | |
| Status | | | | | | | | |
| 1)[\implies] | Responsive to communication(s) filed on 2 | 27 September 2005 | | | | | | |
| 2a)□ | | This action is non-final. | | | | | | |
| 3)□ | Since this application is in condition for alle | | ers, prosecution as to the | e merits is | | | | |
| ŕ | closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | | | | |
| Dispositi | on of Claims | | | | | | | |
| 4)🖂 | Claim(s) 1-3 and 6-73 is/are pending in the | e application. | | | | | | |
| | 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | | | |
| 5)□ | Claim(s) is/are allowed. | | | | | | | |
| 6)⊠ | Claim(s) <u>1-3 and 6-73</u> is/are rejected. | | | | | | | |
| 7) | Claim(s) is/are objected to. | | | | | | | |
| 8)[_ | Claim(s) are subject to restriction a | nd/or election requirement. | | | | | | |
| Applicati | on Papers | | | | | | | |
| 9)□ | The specification is objected to by the Exar | miner. | | | | | | |
| 10) | 10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. | | | | | | | |
| | Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | | |
| _ | Replacement drawing sheet(s) including the co | • | • | ` ' | | | | |
| 11)∐ | The oath or declaration is objected to by th | e Examiner. Note the attached | d Office Action or form P1 | ГО-152. | | | | |
| Priority ι | ınder 35 U.S.C. § 119 | | | | | | | |
| | Acknowledgment is made of a claim for for ☐ All b) ☐ Some * c) ☐ None of: | eign priority under 35 U.S.C. § | 119(a)-(d) or (f). | | | | | |
| | 1. Certified copies of the priority documents have been received. | | | | | | | |
| | 2. Certified copies of the priority docum | | | | | | | |
| | 3. Copies of the certified copies of the | • | received in this National | Stage | | | | |
| * 0 | application from the International Bu | | en and and | | | | | |
| 3 | See the attached detailed Office action for a | riist of the certified copies not | received. | | | | | |
| Attachment | t(s) | | | | | | | |
| | e of References Cited (PTO-892) | | Summary (PTO-413) | | | | | |
| | e of Draftsperson's Patent Drawing Review (PTO-948 nation Disclosure Statement(s) (PTO-1449 or PTO/SE | <i>'</i> | s)/Mail Date nformal Patent Application (PTC | D-152) | | | | |
| | No(s)/Mail Date | 6) Other: | | , | | | | |

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DETAILED ACTION

Continued Examination Under 37 CFR 1.114

- 1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 9/27/2005 has been entered.
- 2. Claims 1-3, 6-73 are currently pending in this application. Independent claims 1, 23, 45, 55, 65, 67, 69, 70-73 have been amended in this amendment.

Claim Rejections - 35 USC § 112

- 3. The following is a quotation of the second paragraph of 35 U.S.C. 112:
 - The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 4. Claims 1-3 and 6-73 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1, 23, 45, 55, 65, 67, 69, 70-73 are indefinite due to the newly added limitation, "an electrostatic air transporter-conditioner". This recitation does not define the structure of the device. If Applicants mean to indicate this as a housing, please state so. Moreover, the newly added recitation renders the claims indefinite because it states that the air transporter-conditioner comprises itself in addition to other parts.

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Note: In light of the specification, the examiner is interpreting that the newly added limitation, "an electrostatic air transporter-conditioner" is a housing of the air transporter-conditioner.

Claim Rejections - 35 USC § 103

- 5. In view of the Office action of 5/16/2005, the rejection of claims 1-3, 8, 10, 14, 17-27, 29, 31, 35, 39-48, 51-59, 61-62, 65, 71-73, under 35 U.S.C. 103(a) as being unpatentable over Satyapal et al. (US Pat. 5,879,435), has been withdrawn due to further consideration.
- 6. In view of the Office action of 5/16/2005, the rejection of claims 6, 11-13, 28, 32-34, 66-70 under 35 U.S.C. 103(a) as being unpatentable over Satyapal in view of Moon (US Pat. 5,215,558), has been withdrawn due to further consideration.
- 7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 8. Claims 1-3, 7-8, 10, 14-27, 29, 31, 35-59, 61-65, 71-73, are rejected under 35 U.S.C. 103(a) as being unpatentable over Okress (US Pat. 3,374,941).

Okress discloses an air blower 10 (electrostatic precipitator) for purifying air, the air blower comprising a housing 12 having an air inlet 14 and an air outlet 16. The inlet and outlet are covered by louvers 18 and 20 respectively. Within housing 12 is ionizing electrodes 26, accelerating electrodes 30, collecting electrodes 28, and UV lights 24. (See Fig. 1; col. 1, ln. 11-17, 49-65; paragraph crossing col. 2 and col. 3).

Although Okress does not teach a plurality of the air inlets, or the air outlets, or a plurality of ion generators, it would have been within the skill in the art that duplication of parts would have no patentable significance (see MPEP 2144.04, section VIB). Furthermore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have modified the Okress device such that it would have had a plurality of air inlets, air outlets, or ion generators, for the purpose of increasing the amount of ionized air and hence enhancing air cleaning efficiency.

With respect to the position of the air inlets, air outlets, or the electrodes, it has been within the skill in the art that rearrangement of parts would have no significant patentable weight (see MPEP 2144.04, section VIC). This is so because it has been known within the skill in the art that airflow is affected by parameters, such as the position, shape, length of the electrodes, and the air inlet and outlet in the device. Moreover, depending upon the arrangement or disposition of the air blower in the room that the air inlets and outlets would be positioned in the housing of the device.

Okress further teaches the collector electrodes being plate electrodes or gridlike structure (see col. 2, ln. 50-52). However, it has been within the skill in the art that particular configurations of the electrodes would have been an obvious matter of design choice, depending upon user's preference and intended use. This is so because it has been known that slight projections or bulging portions of the electrodes, especially the collector electrodes would cause the field of electric stress to be more concentrated at these points of irregularities, causing non-uniform deposition of the particles on the collector electrodes. On the other hand, a more concentrated zone of the electrical wind would reduce the formation of local eddies in the wind

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and thus enhance uniformity in its action. Thus, a skilled artisan would have determined a particular configuration of an electrode by routine optimization, in order to bring forth maximal benefits attendant therewith.

In regards to claims 10, 31, 47, 58-59, it has been settled within the skill in the art that the manner of operation, intended use, or how the product is made, would have insignificant patentable weight when an apparatus claim is being considered (see MPEP 2114).

9. Claims 6, 11-13, 28, 32-34, 66-70 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okress as applied to claims 1, 23, 45, 55, 65 above, and further in view of Moon (US Pat. 5,215,558).

Okress is as set forth in claims 1, 23, 45, 55, and 65 above and incorporated herein.

Okress does not teach the use of a focus or a trailing electrode in the ion generator.

Moon teaches the use of ionizing, collector, auxiliary, and accelerating electrodes (see Fig. 1). The auxiliary electrodes (focus electrodes) are between the ionizing and collector electrodes, whereas the accelerating electrodes (trailing electrodes) are at the end of the collector electrodes.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have included the focus and trailing electrodes, as taught by Moon, into the okress device. It has been known in the art that the focus electrodes are to strengthen the electric field, and the trailing electrodes to enhance effectiveness of dust collection. With respect to the location of the focus and trailing electrodes, it has been within the skill in the art that rearrangement of parts would have no significant patentable weight.

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10. Claim 60 is are rejected under 35 U.S.C. 103(a) as being unpatentable over Okress as applied to claim 55 above, and further in view of Anzai (US Pat. 4,772,297).

Okress is as set forth in claim 55 above and incorporated herein.

Okress does not teach a control device located on the top surface of the housing.

Anzai teaches an air conditioner (air cleaner), comprising an upstanding, elongated housing A having a top surface and a control device (operation section C and sensor section D) (see abstract; Figs. 1-6; col. 2, ln. 41-45, 57-59; col. 3, ln. 41-60; col. 4, ln. 50-57).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have employed a control device, as taught by Anzai, in the Okress device, for the purpose of providing better control of the operation of the air blower.

Response to Arguments

11. Applicant's arguments filed 2/10/2005 have been fully considered but are moot in view of the new ground(s) of rejection.

Contact Information

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thao T. Tran whose telephone number is 571-272-1080. The examiner can normally be reached on Monday-Friday, from 9:00 a.m. - 5:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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December 2, 2005

THAOT.TRAN
PATENT EXAMINER

Thao Tran